



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/607,992	06/30/2003	William McFarland	MR2919-7/C	8178
4586	7590	12/28/2005	EXAMINER PHAN, MAN U	
ROSENBERG, KLEIN & LEE 3458 ELLICOTT CENTER DRIVE-SUITE 101 ELLICOTT CITY, MD 21043			ART UNIT 2665	PAPER NUMBER

DATE MAILED: 12/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/607,992	Applicant(s) MCFARLAND ET AL.	
	Examiner Man Phan	Art Unit 2665	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 32-81 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 32-81 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The application of McFarland et al. for a "Scalable communication system using overlaid signals and multi-carrier frequency communication" filed 06/30/2003 has been examined. This application is a continuation of 09/474,602 is now US Patent# 6,628,673. Preliminary amendment filed 06/30/2003 has been entered and made of record. Claims 1-31 have been canceled, and new claims 32-81 have been added. Claims 32-81 are pending in the application.

Specification

2. Related Applications need to be updated.

The disclosure is objected to because of the following informalities: Under cross references to related applications, page 1, the co-pending application status needs to be updated. Furthermore, application S/N 09/416,098 for the "METHOD AND APPARATUS FOR ELIMINATING THE EFFECTS OF FREQUENCY OFFSETS IN A DIGITAL COMMUNICATION SYSTEM", and application S/N 09/422,829 for the "METHOD AND APPARATUS FOR CLOSED-LOOP AND OPEN LOOP TIMING CONTROL FOR DIGITAL COMMUNICATION SYSTEMS".

Appropriate correction is required.

Double Patenting

3. A rejection based on double patenting of the "same invention" type finds its support in the language of 35 U.S.C. 101 which states that "whoever invents or discovers any new and useful process ... may obtain : patent therefor ..." (Emphasis added). Thus, the term "same

invention" in this context, means an invention drawn to identical subject matter. See *Miller v. Eagle Mfg. Co.*, 151 U.S. 186 (1894); *In re Ockert*, 245 F.2d 467, 114 USPQ 330 (CCPA 1957); and *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970).

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37CFR 3.7309.

5. Claims 32-81 of the present application Serial No. 10/607,992 (hereinafter Application '992) rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-10 of U.S. Patent No. 6,628,673 (hereinafter patent '673) since

the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The claims are identical and they are not patentably distinct from each other because the subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent, since the patent and the application are claiming common subject matter. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims are equivalent in scope and embodiment. The language of the two claims is substantially identical and is equivalent in functioning. All of the structural elements of the patent claims are present in the pending claims, defined with either identical or equivalent language. Additionally, the functional language, scope and embodiment reflect identical operation, purpose, application, and environment.

With respect to the specific limitations, claims 1-10 and their combination of patent '673 is equivalent to the pending claims 32-81 of Application '992 for the use of multi-channel, multi-frequency protocols such as OFDM and DMT in communication systems. Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. It has been held that the omission of an element and its function is an obvious expedient if the remaining elements perform the same function as before. In re Karlson, 136 USPQ 184 (CCPA). Also note Ex parte Rainu, 168 USPQ 375 (Bd. App. 1969); omission of a reference element whose function is not needed would be obvious to one skilled in the art.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The McFarland (US#6,807,146) is cited to show the Protocols for scalable communication system using overland signals and multi-carrier frequency communication.

The Giallorenzi , et al. (US#5,499,236) is cited to show the Synchronous multipoint-to-point CDMA communication system

The Isaksson , et al. (US#6,160,820) is cited to show a Multi-carrier transmission systems

The Vanderspool, II et al. (US#5,261,118) is cited to show a Simulcast synchronization and equalization system and method therefor

The Lomp et al. (US#6,215,778) is cited to show the Bearer channel modification system for a code division multiple access (CDMA) communication system

The Tiedemann, Jr. et al. (US#5,870,427) is cited to show the Method for multi-mode handoff using preliminary time alignment of a mobile station operating in analog mode

The Kotzin et al. (US#5,506,867) is cited to show the Cellular radio system using common radio backbone

The Rybicki et al. (US#5,742,527) is cited to show the Flexible asymmetrical digital subscriber line (ADSL) receiver, central office using same, and method therefor.

The Hunt et al. (US#5,400,322) is cited to show the Updating of bit allocations in a multi carrier modulation transmission system

The Hyll (US#6,005,893) is cited to show the Reduced complexity bit allocation to subchannels in a multi-carrier, high speed data transmission system

The Bauml et al. (US#6,125,103) is cited to show the Method and device for reducing the crest factor in digital transmission procedures

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. Phan whose telephone number is (571) 272-3149. The examiner can normally be reached on Mon - Fri from 6:00 to 3:00.

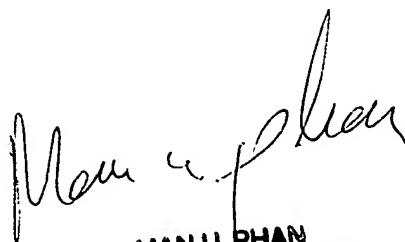
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (571) 272-3155. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.

8. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have any questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at toll free 1-866-217-9197.

Mphan

12/23/2005.



MAN U. PHAN
PRIMARY EXAMINER